Fredericksburg remains in a more or less isolated position and retains the aspects of a frontier town despite the building of a branch line railroad from San Antonio in 1915. Since 1930 three modern highways have been completed providing excellent transportation to all parts of the area. Even with these advantages, however, agricultural practices in the Fredericksburg area seem destined by natural causes to be extensive rather than intensive.

LITERATURE

Biesele, Rudolph Leopold (1930), *The History of the German Settlements in Texas, 1831-1861,* Austin.

Biggers, Donald H. (1925), *German Pioneers in Texas,* Fredericksburg.

Faust, A. B. (1909), *The German Element in the United States,* New York.

Fredericksburg Standard, Anniversary Edition, March 18, 1937.

Records of the German Emigration Society, General Land Office, Austin.

Roemer, Ferdinand (1847), *Texas,* Bonn. (Translation by Oswald Mueller, San Antonio, 1935).

Solms-Braunfels (1846), *Texas, 1844-1845,* Frankfurt. (Reprinted by the Anson Jones Press, Houston, 1936).

Tiling, Mortiz (1913), *History of the German Element in Texas,* Houston.

Origin of the Menard "Crater"

Emmett Blakemore

On August 30, 1938, the foreman of the Wilkerson Ranch twelve miles southwest of Menard, Texas, reported that a meteorite fell on the ranch and created a large crater. The story, widely publicized by newspapers, caused the writer, accompanied by Professor J. D. Boon of Southern Methodist University, to investigate this phenomenon. The reported crater was found by following the Menard-Ft. McKavett highway west nine

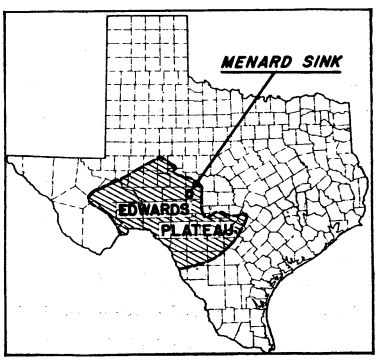

Fig. 1. Location of Menard sink.

miles from Menard to the intersection of a cross-road, thence north three miles to a point 100 yards east of the "crater". Approximate location is shown on map (Fig. 1).

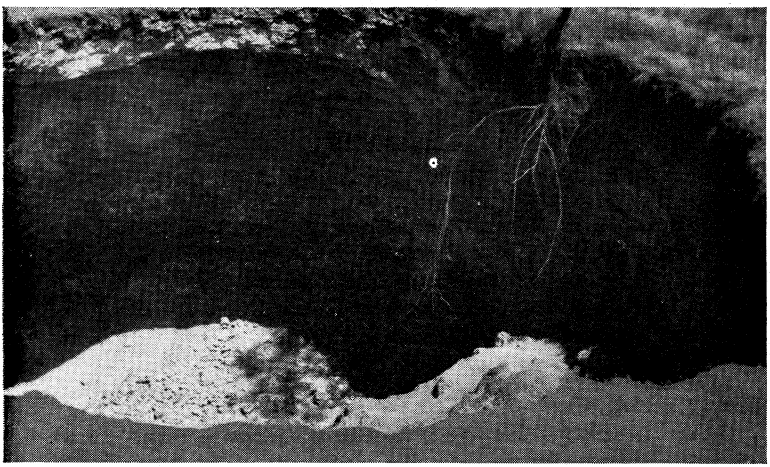

Fig. 2. The Menard sink, reported erroneously as a meteorite crater.

The hole reported to be a meteorite crater was found to be roughly circular in plan with a diameter approximately twenty-five feet and a depth of about thirty feet (Fig. 2). The bedrock of the region is one of the limestone beds of the Fredericksburg group. About five miles south, the San Saba River has eroded through the Fredericksburg and developed its valley on the Trinity group. In the walls of the pit a cobble conglomerate is exposed, the cobbles being fragments of the Fredericksburg limestone with an impure limy matrix which gives poor cementation. This conglomerate resembles very closely the piles of gravel in the bed of the nearby San Saba River. Similar conglomerates with interbedded silt and clay fill numerous abandoned stream channels exposed in road cuts in the area. The distinct horizontal bedding in the conglomerate is best shown near the edge of the pit, where the rock contains less water. Apparently the bottom of the hole is composed of the same material as the enclosing walls except that the

south side is covered by slumped soil containing traces of grass. The depth of the bedrock at this point, could not be determined.

It is difficult to see any relationship between this pit and craters known to be of meteoritic origin. There is no rim of ejected material. There is no evidence of distortion in the beds exposed at the brink; grasses grow to the margin, and at one place a mesquite tree hangs precariously over the hole with its roots dangling. The mesquites growing close to the pit and the one which hangs partially over it show no signs of the intense heat which would be associated with a falling meteorite.[1] The cobbles in the bottom of the pit are unfractured, as are those of the conglomerate composing the walls. Some fracturing and pulverization would be expected should a meteoritic origin be assumed. A magnet used in the area did not gather iron fragments.

The Menard crater is a limestone sink. It is situated in a region of soluble limestones and marls in which numerous caverns have been excavated. The month preceding the formation of the sink was one of heavy rains and floods; subsurface erosion should have been at a maximum. All of the material which once filled the hole appears to have moved downward to fill a collapsed cavern.

This pit is neither unusual nor fundamentally different from the innumerable sinks that dot the Edwards Plateau. This paper is designed to correct a popular fallacy regarding the origin of the Menard "crater", one which might cause future investigators of meteorite craters unnecessary travel and expense.

---

[1]Rogers, A. F., (1930) "A Unique Occurance of Lechatelierite or Silica Glass", *American Journal of Science*, 5th Series, Vol. XIX, pp. 195-202.